

WHAT IS CLAIMED IS:

1. An Internet-based consumer product marketing, merchandising and education/information system which enables manufacturers, their agents, retailers and their agents, and consumers to carryout product-related functions along the demand side of the retail chain, comprising:

a central UPN/TM/PD/URL RDBMS for storing a central database of UPN/TM/PD/URL links;

a first subsystem for enabling a manufacturer's marketing, brand and/or product managers to create and manage a local database of UPN/TM/PD/URL links related to the consumer products of the manufacturer being offered for sale in both physical and/or electronic marketplaces, and periodically transport said local database of UPN/TM/PD/URL links to said central UPN/TM/PD/URL RDBMS by electronic data interchange techniques, said local database of UPN/TM/PD/URL links being managed with a local UPN/TM/PD/URL RDBMS, and selected by the manufacturer's marketing, brand and/or product managers so as to create a desired brand image for each said consumer product of the manufacturer;

a second subsystem for enabling consumers to access one or more UPN/TM/PD/URL links in said central UPN/TM/PD/URL RDBMS, to request and obtain information about a manufacturer's consumer product so as to make informed/educated purchases along the demand side of the retail chain; and

one or more subsystems selected from the group consisting of:

a third subsystem for enabling manufacturers and their advertising and marketing agents to access one or more UPN/TM/PD/URL links in said central UPN/TM/PD/URL RDBMS, to display consumer product advertisements to consumers, at or near the point of purchase or sale within both physical and/or electronic retail shopping environments so as to project the desired brand image to consumers; and

a fourth subsystem for enabling retailers and their marketing and promotional agents to access one or more UPN/TM/PD/URL links in said central UPN/TM/PD/URL RDBMS, to promote consumer products to consumers, at or near the point of purchase or sale within both physical and/or electronic retail shopping environments so as to promote the sale of such products in inventory;

wherein said central UPN/TM/PD/URL RDBMS, said local UPN/TM/PD/URL RDBMS, and said first, second, third and fourth subsystems are each operably connected to the infrastructure of the Internet.

5 2. The Internet-based consumer product marketing, merchandising and education/information system of claim 1, wherein said second subsystem further enables retailer purchasing agents to access one or more UPN/TM/PD/URL links in said central UPN/TM/PD/URL RDBMS, to request and obtain information about a manufacturer's consumer product so as to make informed/educated purchases along the supply side of the retail chain.

10 3. The Internet-based consumer product marketing, merchandising and education/information system of claim 1, wherein said second subsystem comprises one or more information access and display devices selected from the group consisting of:

15 a network of barcode-driven/touch-screen-enabled physical CPI kiosks are physically installed within physical retail environments using wireless Internet-connectivity enabling technology, and made accessible to retail shoppers in physical retail environments; and

20 a network of virtual CPI kiosks enabled by CPIR-enabling Applets symbolically embedded within the HTML-fabric of the WWW (e.g. in EC-based retail stores and catalogs, on-line auction sites, Internet product advertisements), and made accessible to retail shoppers across the Internet.

25 4. The Internet-based consumer product marketing, merchandising and education/information system of claim 3, wherein said second subsystem further comprises a plurality of Web (http) information servers for driving said network of barcode-driven/touch-screen-enabled physical CPI kiosks.

30 5. The Internet-based consumer product marketing, merchandising and education/information system of claim 3, wherein said second subsystem further comprises a plurality of CPIR-enabling Applet servers for driving said network of virtual CPI kiosks enabled by CPIR-enabling Applets symbolically embedded within the HTML-fabric of the WWW, including retailer-oriented WWW sites served to physical CPI kiosks in a retailer's store.

6. The Internet-based consumer product marketing, merchandising and education/information system of claim 3, wherein said central UPN/TM/PD/URL RDBMS further includes a data processing/filtering subsystem for processing data contained within said central UPN/TM/PD/URL RDBMS so that each physical CPI kiosk connected to an enabling Web server (and deployed within a particular retailer's store) is capable of displaying only UPN/TM/PD/URL links created by manufacturer's who (i) sell products in the retailer's physical store and (ii) have acquired rights and/or privileges (by the retailer) to display products on the retailer's store shelves about which said physical CPI kiosk is physically installed.

7. The Internet-based consumer product marketing, merchandising and education/information system of claim 5, wherein said second subsystem comprises a CPIR-enabling Applet/Servlet Generator for automatically generating, for each UPN/TM/PD/URL link record in said central UPN/TM/PD/URL RDBMS, a CPIR-enabling Applet/Servlet, wherein (i) the compiled code associated with the CPIR-enabling Applet/Servlet is loaded onto one of said plurality of CPIR-enabling Applet servers, and (ii) the corresponding CPIR-enabling Applet tag is loaded within a CPIR-enabling Applet Catalog Web Server for viewing and downloading by retailers, advertisers, auctioneers, et al, and subsequent embedment into the HTML-fabric of WWW.

8. The Internet-based consumer product marketing, merchandising and education/information system of claim 5, wherein said second subsystem comprises a data processing/filtering subsystem (e.g. modules of data processing scripts), integrated with said central UPN/TM/PD/URL RDBMS, for processing data within said central UPN/TM/PD/URL RDBMS so that each virtual CPI kiosk deployed within a particular retailer's electronic store and enabled by at least one said CPIR-enabling Applet server is capable of displaying only UPN/TM/PD/URL links created by manufacturer's who (i) sell products in the retailer's electronic store (i.e. e-store) and (ii) have acquired rights and/or privileges (by the retailer) to display products on the retailer's virtual shelves (e.g. Web pages) about which the virtual kiosk is installed within the HTML-fabric of the retailer's e-store.

9. The Internet-based consumer product marketing, merchandising and education/information system of claim 1, wherein said first subsystem comprises:

one or more information servers for delivering a suite of information services to manufacturers (i.e. vendors) including, the downloading of and providing technical support for software-based EDI-enabled UPN/TM/PD/URL link creation, management and transport (LCMT) tools that are made available to registered manufacturers, and their agents, as well as to anyone else operating along the retain chain as a vendor of consumer products (which may also include retailers as well); and

wherein said software-based EDI-enabled UPN/TM/PD/URL LCMT tools enable the manufacturer's marketing, brand and/or product managers (and their support personnel) to efficiently carry out UPN/TM/PD/URL data-linking and transport operations which are required to build and maintain said local database.

10. The Internet-based consumer product marketing, merchandising and education/information system of claim 1, wherein said second subsystem comprises a data processing/filtering subsystem for data processing (i.e. filtering) said UPN/TM/PD/URL links and data contained in said central UPN/TM/PD/URL RDBMS, in various ways prior to distribution to consumers, so as to preserve the trust, confidence and goodwill developed between manufacturers and retailers in both physical and electronic streams of commerce.

11. The Internet-based consumer product marketing, merchandising and education/information system of claim 10, wherein said data processing/filtering subsystem involves using information about (i) the manufacturers represented (or promoted) by a particular retailer in a particular retail environment, as well as (ii) the rights and/or privileges accorded to product manufacturers and/or distributors (i.e. vendors) by retailers with regard to displaying a manufacturer's product in a particular aisle of the retailer's store and optionally at a particular shelf location, as well as on a particular Web-page(s) of a retailer's electronic store or catalog (e.g. virtual aisles) and optionally at a particular location (i.e. virtual shelf location) therealong.

12. The Internet-based consumer product marketing, merchandising and education/information system of claim 9, wherein said software-based EDI-enabled

UPN/TM/PD/URL LCMT tools enable a manufacturer's marketing, brand and/or managers to create and manage a list of UPN/TM/PD/URL links for each consumer product within their product portfolio, store said list of UPN/TM/PD/URL links within said local database, realized as a locally managed UPN/TM/PD/URL RDBMS, and electronically transporting said list of UPN/TM/PD/URL links from said locally managed UPN/TM/PD/URL RDBMS to said central UPN/TM/PD/URL RDBMS, for distribution and display to consumers in the form of a UPN/TM/PD/URL link display GUI.

13. The Internet-based consumer product marketing, merchandising and education/information system of claim 3, wherein said third subsystem enables an advertisers (including a retailer, a manufacturer or its agent) to buy advertising slots available on particular retailer-deployed barcode-driven physical CPI kiosks (and/or retailer-deployed virtual CPI kiosks) and deliver the short UPC-indexed product advertisements to consumers over physical and/or virtual CPI kiosks in physical and/or electronic retail stores during moments when consumers are not requesting consumer product related information from said system.

14. The Internet-based consumer product marketing, merchandising and education/information system of claim 13, wherein said third subsystem enables advertisers to perform one or more functions selected from the group consisting of: (i) register with the system; (ii) log onto the Advertisement Slot Marketing/Sales/Management Web Site maintained by the system administrator or its designated agent; (iii) view catalogs of physical and/or virtual CPI kiosks deployed within retail shopping environments by retailers, at which a registered advertiser can consider purchasing advertisement slots on manufacturer/retailer authorized kiosks; (iv) purchase advertisement slots on manufacturer/retailer authorized physical or virtual) CPI kiosks deployed in physical or electronic retail shopping space; (v) create, deploy and manage advertising campaigns over one or more physical and/or virtual kiosks deployed by retailers in retail space; and (vi) monitor the performance of kiosk-based advertising campaigns during execution, as required by client demands and prevailing business considerations, using any Web-enabled client subsystem.

15. The Internet-based consumer product marketing, merchandising and education/information system of claim 3, wherein said fourth subsystem enables a promoter (including a retailer, a manufacturer or its agent) to create customized product promotion campaigns, containing short UPC-indexed product advertisements, sales prices and aisle/shelf location directions, for presentation over the network of barcode-driven/touch-screen enabled physical CPI kiosks deployed within its retail store, or chain of stores, and later analyze the effectiveness of the campaign by comparing sales data collected at the barcode driven point-of-sale (POS) stations within the same retail stores in which the participating physical CPI kiosks are deployed.

16. The Internet-based consumer product marketing, merchandising and education/information system of claim 3, wherein said fourth subsystem enables promoters to perform one or more functions selected from the group consisting of: (i) register with system; (ii) log onto the Promotion Slot Marketing/Sales/Management Web Site maintained by the system administrator or its designated agent; (iii) view catalogs of physical and/or virtual CPI kiosks deployed within retail shopping environments by retailers, at which a registered promoter can consider purchasing or otherwise acquiring promotion slots on manufacturer/retailer authorized kiosks; (iv) purchase or otherwise acquire (product sales) promotion slots on manufacturer/retailer authorized physical or virtual kiosks deployed in retail shopping space; (v) create, deploy and manage product promotion campaigns over one or more physical and/or virtual kiosks deployed by retailers (or manufacturers) in retail space; and (vi) monitor the performance of kiosk-based promotion campaigns as required by client demands and prevailing business considerations, using any Web-enabled client subsystem.

17. The Internet-based consumer product marketing, merchandising and education/information system of claim 9, wherein said software-based EDI-enabled UPN/TM/PD/URL LCMT tools are down-loaded to a plurality of users within the manufacturer's enterprise, so as to enable different users within different departments to link and manage predetermined categories of UPN/TM/PD/URL links within said local database.

18. The Internet-based consumer product marketing, merchandising and education/information system of claim 1, wherein the UPN/TM/PD/URL links in said central UPN/TM/PD/URL RDBMS are distributed over the Internet so as to enable one or more functions selected from the group consisting of: (i) consumers and end-users within physical retail environments having access to a plurality of physical CPI kiosks driven by a plurality of Web (http) servers operably connected to the infrastructure of the Internet; (ii) consumers and end-users within electronic retail environments having access to a plurality of virtual CPI kiosks driven by a plurality of CPIR-enabling Java Applet servers operably connected to the infrastructure of the Internet; and (iii) consumers and end-users interfaced with a plurality of Web-enabled client machines at home, school, in the office or on the road having access to a plurality of UPN-driven consumer product information portals on the WWW, driven by a plurality of mirrored http information servers operably connected to said central UPN/TM/PD/URL RDBMS.

19. The Internet-based consumer product marketing, merchandising and education/information system of claim 1, wherein said second subsystem further comprises one or more Web information servers are provided for serving up to the public, in different languages, WWW sites at which said central UPN/TM/PD/URL RDBMS is searchable by the public without the restriction of MIN and UPN data filters that might be maintained within retail shopping environments to preserve the goodwill embodied within manufacturer and retailer relationships along the retail chain.

20. The Internet-based consumer product marketing, merchandising and education/information system of claim 1, wherein said second subsystem further comprises a GPS-time synchronized WAP-enabled information server for delivering consumer product information links from said central UPN/TM/PD/URL RDBMS to a GSU-enabled wireless Web-enabled palm computer carried by a consumer within a physical retail shopping space, when, for example, the palm computer is physically located within a particular portion of the physical retail shopping space.

21. The Internet-based consumer product marketing, merchandising and education/information system of claim 3, wherein said second subsystem comprises a CPIR-enabling Applet/Servlet Generator for automatically generating a CPIR-enabling Applet/Servlet for each UPN/TM/PD/URL link record in the UPN/TM/PD/URL RDBMS, wherein (i) the compiled code associated with the CPIR-enabling Applet/Servlet is loaded onto one of said plurality of CPIR-enabling Applet servers, and (ii) the corresponding CPIR-enabling Applet tag is loaded within a CPIR-enabling CPIR-enabling Applet Tag Catalog Web Server for enabling retailers, advertisers, auctioneers, et al to view CPIR-enabling Applet tags catalogued therein and download said CPIR-enabling Applet tags for embedment within the HTML-encoded fabric of the WWW.

22. An Internet-based consumer product marketing, merchandising and education/information system of claim 1, wherein the URLs linked to each UPN/TM/PD/URL information record maintained in said central UPN/TM/PD/URL RDBMS are organized for display to consumers in two different categories, namely: Pre-purchase Related CPI Links for informing and educating consumers, and Post-Purchase Related CPI Links for providing customers with product related service, instruction and technical support while promoting the retention of customers by such value-added services after the consumer purchase.

23. An Internet-based consumer product marketing, merchandising and education/information system of claim 3, wherein first subsystem enables manufacturers to perform one or more functions selected from the group consisting of: (1) supporting manufacturer registration operations; (2) downloading UPN/TM/PD/URL link creation, management and EDI-enabled transport (LCMT) software to registered manufacturers; (3) installing and setting up such software within the manufacturer's enterprise; (4) selecting and customizing the GUI Design for the UPN/TM/PD/URL link display menu filled by the UPN/TM/PD/URL link creation, collection, management and EDI-enabled transport software (e.g. including Manufacturer Customization Options, Default CPI Categories for linked URLs, Custom CPI Categories for linked URLs); (5) On-Line Training for UPN/TM/PD/URL Link Creation, Collection, Management and Transport Software; (6) Updating Manufacturer



Registration Information; (7) Registering Manufacturer's Product Advertising Agents; and (8) Registering Manufacturer's Product Promotional Agents.

24. The Internet-based consumer product marketing, merchandising and education/information system of claim 1, wherein said first subsystem further comprises one or more EDI information servers operably connected to said central UPN/TM/PD/URL RDBMS and the infrastructure of the Internet, for receiving the structured files of said local UPN/TM/PD/URL RDBMS locally managed within the manufacturer's enterprise using UPN/TM/PD/URL link creation, collection, management and EDI-enabled transport software downloaded from one or more of said information servers, and wherein one or more manufacturer-operated client subsystems run said UPN/TM/PD/URL LCMT software so as to enable marketing, brand and/or product managers to create and manage UPN/TM/PD/URL links with said local RDBMS, as well as transport said UPN/TM/PD/URL links contained therein to said central UPN/TM/PD/URL RDBMS using electronic data transport techniques.

25. The Internet-based consumer product marketing, merchandising and education/information system of claim 1, wherein said first subsystem further comprises one or more information servers for downloading to each manufacturer registered with said first subsystem, UPN/TM/PD/URL link creation, management and transport (LCMT) software for running on one or more manufacturer-operated/managed client computer subsystems, and wherein said UPN/TM/PD/URL LCMT software generates, on each said manufacturer-operated/managed client computer subsystem, a graphical user interface (GUI) which comprises a number of display structures selected from the group consisting of: a window-style framework having a toolbar menu along the upper portion of the framework and an information display window centrally disposed within the framework and having horizontal and vertical scroll bars respectively, for moving into view the UPN/TM/PD/URL link information about a UPN-indexed product registered in its local database; a Use Default URL Link Categories button for enabling the user to create a prespecified set of URL link data fields, organizable into pre-purchase and post-purchase types, into which active URL links can be entered manually, semi-automatically or automatically using the various techniques described hereinabove; a Create Custom URL Link Categories button for enabling the user to create a custom-designed set of URL link fields,

organizable into, pre-purchased and post-purchase types, into which active URL links can be entered manually or using the semi-automated techniques; a Create URL Link button for enabling the user to enter URLs into the URL link categories established within said local database under construction; Manage (i.e. Edit) URL Link button for enabling the user to edit URLs entered into the URL link categories established within the local UPN/TM/PD/URL RDBMS under construction or management; a Transport UPN/TM/PD/URL RDBMS button for enabling the user to manually or automatically initiate/activate the transport of the locally-managed UPN/TM/PD/URL RDBMS to the centrally maintained UPN/TM/PD/URL RDBMS using EDI (e.g. ftp, XML, conventional EDI, etc.) processes; UPN/TM/PD/URL Link Record data field for displaying the UPN, trademarks, product descriptors, and URLs related to the consumer product assigned the UPN by the UPC manager of the manufacturer (or vendor); a UPN data field for displaying the UPN associated with a particular UPN/TM/PD/URL Link Record data field; a Trademark (i.e. brand name) data field for displaying the primary trademark associated with a particular UPN/TM/PD/URL Link Record data field; a Product Descriptor (PD) data field for displaying a generic product description or descriptor associated with a particular UPN/TM/PD/URL Link Record data field; a Pre-purchase URL Link Record for displaying a first plurality of Categorized URL Records, each Categorized URL Record containing a Pre-purchase Related URL Category Label and a URL string pointing to an information resource on the Internet, and associated with a particular UPN/TM/PD/URL Link Record data field; and a Post-purchase URL Link Record for displaying a second plurality of Categorized URL Records, each Categorized URL Record containing a Post-purchase Related URL Category Label and a URL string pointing to an information resource on the Internet, and associated with a particular UPN/TM/PD/URL Link Record data field.

26. The Internet-based consumer product marketing, merchandising and education/information system of claim 25, wherein the data displayed within said GUI is obtained from the data tables comprising said central UPN/TM/PD/URL RDBMS, and the UPN, TM and PD data fields thereof are automatically populated with data imported from a UPC management RDBMS for maintaining a UPC Product Sales Catalog, during data importation and synchronization operations.

27. The Internet-based consumer product marketing, merchandising and education/information system of claim 25, wherein said UPN/TM/PD/URL LCMT software provides the manufacturer's marketing, brand and/or product managers with a wide range of choice in URL Link Category labeling, including a means for creating custom-designed URL Link Category labels, and means for producing a list of pre-designed Default URL Link Category label sets, each being specifically tailored to a particular segment and sector of the consumer product industry.

28. The Internet-based consumer product marketing, merchandising and education/information system of claim 3, wherein each physical and/or virtual CPI kiosk is provided with a graphical user interface (GUI) for visually displaying UPN/TM/PD/URL link records accessed from the UPN/TM/PD/URL RDBMS, and wherein said kiosk GUI comprises a number of display structures selected from the group consisting of: a scalable window-style framework having a toolbar menu along the upper portion of the framework and an information display window centrally disposed within the framework and having horizontal and vertical scroll bars, for displaying (i) UPN/TM/PD/URL link information about any UPN-indexed product registered in its local database in response to a UPN-directed search against the central UPN/TM/PD/URL RDBMS, and (ii) a list of UPN/TM/PD links returned from a trademark (TM) directed search, product directed (PD) search, or manufacturer's home-page (MHP) directed search made against said central UPN/TM/PD/URL RDBMS; a UPN-Directed Search button for enabling the user to initiate a UPN-directed search against the central UPN/TM/PD/URL RDBMS; a TM-Directed Search button for enabling the user to initiate a TM-directed search against said central UPN/TM/PD/URL RDBMS; a PD-Directed Search button for enabling the user to initiate a PD-directed search against said central UPN/TM/PD/URL RDBMS; a MHP-Directed Search button for enabling the user to initiate a MHP-directed search against said central UPN/TM/PD/URL RDBMS; UPN data field for displaying the UPN associated with a particular UPN/TM/PD/URL Link Record data field retrieved from said central UPN/TM/PD/URL RDBMS; a First Trademark (i.e. brand name) data field for displaying the primary trademark associated with the particular UPN/TM/PD/URL Link Record data field; a Second Trademark (i.e. brand name) data field for displaying the secondary trademark associated with the particular UPN/TM/PD/URL Link Record data field; a Product Descriptor data field for

displaying a generic product description or descriptor associated with the particular UPN/TM/PD/URL Link Record data field; a Pre-purchase URL Link Record for displaying a first plurality of Categorized URL Records, each Categorized URL Record containing a Pre-purchase Related URL Category Label and a URL string pointing to an information resource on the Internet, and associated with a particular UPN/TM/PD/URL Link Record data field; and a Post-purchase URL Link Record for displaying a second plurality of Categorized URL Records, each Categorized URL Record containing a Post-purchase Related URL Category Label and a URL string pointing to an information resource on the Internet, and associated with a particular UPN/TM/PD/URL Link Record data field.

29. An Internet-based consumer product marketing, merchandising and education/information system of claim 28, wherein when the manufacturer (or vendor) has decided to use the predesigned default URL Link Category labels for its UPN/TM/PD/URL link creation, management and transport GUI, as defined in claim 25, then the physical and virtual kiosk GUIs used to display the manufacturer's (or vendor's) UPN/TM/PD/URL links to consumers will use substantially the same predesigned Default URL Link Category labels to display URLs linked to the UPN/TM/PD/URL Link Records transported to said central UPN/TM/PD/URL RDBMS.

30. The Internet-based consumer product marketing, merchandising and education/information system of claim 28, wherein when the manufacturer (or vendor) has decided to use Custom (manufacturer-created) URL Link Category labels for its UPN/TM/PD/URL LCMT GUI, as defined in claim 25, then the physical and virtual kiosk GUIs used to display the manufacturer's (or vendor's) UPN/TM/PD/URL links to consumers will use the same custom-created URL Link Category labels to display URLs linked to particular UPN/TM/PD/URL Link Records.

31. The Internet-based consumer product marketing, merchandising and education/information system of claim 1, wherein said second subsystem enables retailers to perform one or more functions selected from the group consisting of: (1) supporting retailer (and e-retailer) and manufacturer registration operations; (2) updating and displaying the Kiosk

Deployment Directory for the registered retailer or manufacturer; (3) enabling retailers to select and order physical and/or virtual kiosks for deployment, and manufacturers to select and order virtual kiosks for deployment by the manufacturer or others; (4) specifying the location of physical kiosk installation and deployment, and the domain of virtual kiosk installation and deployment; (5) selecting particular information services to be enabled on and delivered to ordered/deployed CPI kiosks in order to configure the same for its intended application; (6) selecting and customizing the kiosk GUI Design (as a further part of the kiosk configuration process); (7) registering the manufacturer's Aisle/Shelf Rights and Privileges on deployed CPI kiosks; (8) registering the retailer's (or manufacturer's) advertising agents as the case may be; (9) registering the retailer's (or manufacturer's) product promotional agents as the case may be; (10) monitoring the performance of registered retailer (or manufacturer) advertising agents as the case may be; and (11) monitoring the performance of registered retailer (or manufacturer) promotional agents as the case may be.

32. The Internet-based consumer product marketing, merchandising and education/information system of claim 1, wherein said second subsystem enables retailers to perform one or more functions selected from the group consisting of: Registration of Retailer/Creation of Retailer Account; Log-in by Retailer; Update and Display Kiosk Deployment Directory; Select and Order Physical and Virtual Kiosks for Deployment; Specification of The Location/Domain of Kiosk Installation and Deployment; Selection of Information Services Delivered by Deployed CPI Kiosks; Selection and Customization of CPI Kiosk GUI Design; Registration of Manufacturer's Aisle/Shelf Rights and Privileges on CPI Kiosks; Registration of Retailer's Advertising Agents; Registration of Retailer's Product Promotional Agents; Monitor Performance of Registered Retailer Advertising Agent; and Monitor Performance of Registered Retailer Promotional Agent.

33. The Internet-based consumer product marketing, merchandising and education/information system of claim 33, wherein second subsystem wherein enables retailers to configure its physical CPI kiosks to have a graphical user interface (GUI) which displays a 2-D or 3-D computer graphics model for the aisle and shelf space disposed about the physical CPI kiosk and this computer graphics model is displayed through the physical kiosk GUI so that a

consumer viewing the physical CPI kiosk, and the consumer products displayed thereabout, sees (on the touch-screen display screen of the kiosk) a virtual model of the surrounding aisle and shelf space and all of the brands of products displayed thereon.

5 34. The Internet-based consumer product marketing, merchandising and education/information system of claim 33, wherein each virtual product displayed through said GUI will carry its trademark (i.e. brand), and its location will spatially correspond to the location of its graphical image or icon with the virtual aisle/shelf model displayed on the physical CPI kiosk.

10 35. The Internet-based consumer product marketing, merchandising and education/information system of claim 33, wherein using said GUI, the consumer can access and display the UPN/TM/PD/URL link record associated with a particular consumer product by simply touching the graphical image or icon of a particular consumer product displayed on the touch-screen enabled physical CPI kiosk, and upon the display of the UPN/TM/PD/URL link record, the consumer can then select the URL links relating to types of information sought by the consumer.

15 36. The Internet-based consumer product marketing, merchandising and education/information system of 33, wherein the 2-D or 3-D computer graphics model of the physical shelf (and aisle) space about the physical CPI kiosk is created by the retailer or its agent using appropriate computer-graphic store aisle/shelf modeling software made accessible to the retailer or its agent by said second subsystem, and such computer graphic models are stored within said central UPN/TM/PD/URL RDBMS.

20 37. The Internet-based consumer product marketing, merchandising and education/information system of claim 35, wherein said second subsystem enables the retailer to register a manufacturer (i.e. vendor) aisle/shelf rights with respect to a particular physical CPI kiosk deployed in retail store.

38. The Internet-based consumer product marketing, merchandising and education/information system of claim 35, wherein said manufacturer (i.e. vendor) aisle/shelf rights registration is carried out using either a portable wireless bar code symbol reader to read the UPC or UPC/EAN labels on consumer products located on the physical shelves and/or in the physical aisles surrounding the physical CPI kiosk, or using either a portable wireless optical character reader to read the UPC or UPC/EAN labels on consumer products located on the physical shelves and in the physical aisles surrounding the physical CPI kiosk.

39. The Internet-based consumer product marketing, merchandising and education/information system of claim 38, wherein said portable wireless bar code reader or optical character reader is RF-linked to any particular physical CPI kiosk (but preferably to the one being programmed with manufacturer aisle/shelf rights/privileges), or the LAN to which the physical CPI kiosk is connected, and wherein said physical CPI kiosk has a manufacturer aisle/shelf right/privilege registration mode which can be selected on the physical CPI kiosk to which the bar code symbol reader or optical character reader is linked during manufacturer aisle/shelf right registration operations.

40. The Internet-based consumer product marketing, merchandising and education/information system of claim 39, wherein a UPC-directed method of registering manufacturer aisle/shelf rights/privileges is carried out by: (1) the retailer inducing the physical CPI kiosk into its Manufacturer Aisle/Shelf Rights/Privileges Registration Mode, in which the physical CPI kiosk is ready to be programmed with manufacturer identification numbers (MINs) against the physical CPI kiosk's identification number; and (2) the retailer reading the UPC symbol labels on different brands of consumer products on the shelves about the physical CPI kiosk, within and about the aisles thereof, so that such information can be transmitted back to said central UPN/TM/PD/URL RDBMS for processing.

42. The Internet-based consumer product marketing, merchandising and education/information system of claim 37, wherein said manufacturer (i.e. vendor) aisle/shelf rights registration is carried out by reading the UPNs on consumer products using at least one of the methods in the group consisting of: (1) using ones eyes and then entering such information

into the system by way of keyboard data entry operations; (2) using a bar code symbol reader with memory which subsequently downloaded to the UPN/TM/PD/URL RDBMS; and (3) using a bar code symbol reader RF-linked to the physical CPI kiosk being programmed, or to a central wireless network controller with IP-connectivity to the LAN to which the interfaced physical CPI kiosk is connected.

42. The Internet-based consumer product marketing, merchandising and education/information system of claim 41, wherein the UPNs inputted to said second subsystem are analyzed and the MINs parsed out therefrom to determine a list of manufacturers having aisle/shelf rights to the particular physical kiosk, thereby providing the corresponding kiosk with retailer authorization to subsequently accept product advertisement and promotion spot orders for display to consumer, and for manufacturers not having aisle/shelf rights/privileges to a particular physical CPI kiosk, such manufacturers and their advertising and promotional agents are permitted to place product advertisement and promotion spot orders to run on the particular CPI kiosk being programmed, thereby respecting aisle/shelf rights/privileges granted to particular manufacturers by particular retailers as part of their business agreements.

42. The Internet-based consumer product marketing, merchandising and education/information system of claim 37, wherein said second subsystem enables a TM-directed method of registering manufacturer aisle/shelf rights/privileges by using one or more techniques selected from the group consisting of: (1) the retailer inducing the physical CPI kiosk into its Manufacturer Aisle/Shelf Rights/Privileges Registration Mode so that the physical kiosk is ready to be programmed with manufacturer identification numbers (MINs) against the physical CPI kiosk's identification number; and (2) the retailer reading the trademark (or brand name) labels on different brands of consumer products on the shelves about the physical CPI kiosk, within and about the aisles thereof, and entering such information into the system (e.g. via virtual keyboard displayed on the CPI kiosk GUI during this state of programming) so that such information can be transmitted back to the UPN/TM/PD/URL RDBMS for processing.

43. The Internet-based consumer product marketing, merchandising and education/information system of claim 42, wherein said trademark reading operations can be



carried using one or more techniques selected from the group consisting of: (1) using ones eyes and then entering such information into the system by way of keyboard data entry operations; (2) using an optical character reader with memory which subsequently downloaded to said central UPN/TM/PD/URL RDBMS; or (3) using an optical character reader RF-linked to the kiosk being programmed, or to a central wireless network controller with IP-connectivity to the LAN to which the interfaced physical CPI kiosk is connected.

44. The Internet-based consumer product marketing, merchandising and education/information system of claim 43, wherein the TMs inputted to said second subsystem are used to determine a list of manufacturers (identified by MIN) having aisle/shelf rights to the particular CPI kiosk, thereby providing the corresponding physical CPI kiosk with retailer authorization to subsequently accept product advertisement and promotion spot orders for display to consumers, and for manufacturers not having aisle/shelf rights/privileges to a particular physical CPI kiosk, such manufacturers and their advertising and promotional agents are not permitted to place product advertisement and promotion spot orders to run on the particular CPI kiosk being programmed, thereby respecting aisle/shelf rights/privileges granted to particular manufacturers by particular retailers as part of their business agreements.

45. The Internet-based consumer product marketing, merchandising and education/information system of claim 1, wherein said second subsystem enables manufacturers to perform one or more functions selected from the group consisting of: Registration of Manufacturer/Creation of Manufacturer Account; Log-in by Manufacturer; Update and Display of Manufacturer's Virtual CPI Kiosk Deployment Directory; Select and Order Virtual CPI Kiosks for Deployment; Specification of The Domain of Virtual Kiosk Installation and Deployment; Selection of Information Services Delivered by Deployed Virtual CPI Kiosks; Selection and Customization of Virtual Kiosk GUI Design; Registration of Manufacturer's Virtual Aisle/Shelf Rights and Privileges on Virtual CPI Kiosks; Registration of Manufacturer's Advertising Agents Registration of Manufacturer's Product Promotional Agents; Monitor Performance of Registered Manufacturer Advertising Agent; and Monitor Performance of Registered Manufacturer Promotional Agent.

46. The Internet-based consumer product marketing, merchandising and education/information system of claim 45, wherein once logged-in to said second subsystem, the manufacturer may view one or more directories selected from the group consisting of: (i) a directory/catalog of the virtual UPN-restricted/product-specific CPI kiosks which are currently deployed on the WWW; and (ii) a directory of virtual UPN-restricted/product-specific CPI kiosks which may be deployed and install on the WWW by others who download the enabling CPIR-enabling Applet tags from the CPIR-enabling Applet Tag Server, and embed the tags in the HTML-fabric of the WWW at domains where the virtual kiosks are to be installed.

47. The Internet-based consumer product marketing, merchandising and education/information system of claim 45, wherein the manufacturer may choose to deploy multi-mode type virtual product-specific CPI kiosks to the general public so that advertisements and/or product promotions can be programmably displayed from the virtual kiosk when launched from its point of installation on the WWW.

48. The Internet-based consumer product marketing, merchandising and education/information system of claim 47, wherein a CPIR-enabling Applet enables each said multi-mode type virtual product-specific CPI kiosk, and one or more of said multi-mode type virtual product-specific CPI kiosks are designed to automatically launch at the time of displaying its host HTML document, thereby providing a kiosk GUI on which to display product advertisement and/or promotion spots about the manufacturer's product.

49. The Internet-based consumer product marketing, merchandising and education/information system of claim 1, wherein said third subsystem enabling one or more information services selected from the group consisting of: (1) registering advertisers (e.g. agents of manufacturers and retailers) and the creating advertiser accounts; (2) logging into the subsystem as a registered advertiser; (3) displaying General Kiosk Advertising Directories and identifying CPI kiosks on which the advertiser is authorized to display advertisements on consumer products; (4) displaying Brand Kiosk Advertising Directories and identifying CPI kiosks on which the advertiser is authorized to display advertisements on a particular brand of consumer products; (5) registering Kiosk Advertising Campaigns to be displayed on a retailer-

authorized (initially-unspecified) subnetwork of CPI kiosks; (6) building Kiosk Advertising Campaigns by placing advertisement spot orders to be run on a specified subnetwork of CPI kiosks; (10) running and displaying Kiosk Advertising Campaigns on the retailer-authorized subnetwork of CPI kiosks, (11) modifying Kiosk Advertising Campaigns, and (12) monitoring the performance of Kiosk Advertising Campaigns.

50. The Internet-based consumer product marketing, merchandising and education/information system of claim 49, wherein said third subsystem enables one or more information services selected from the group consisting of: Registration of Advertiser/Creation of Advertiser Account; Log-in by Advertiser; Display General Kiosk Advertising Directory Identifying CPI Kiosks on which the Advertiser is Authorized to Display Advertisements on Consumer Products; Display Brand Kiosk Advertising Directory Identifying CPI Kiosks on which the Advertiser is Authorized to Display Advertisements on a Particular Brand of Consumer Products; Register Kiosk Advertising Campaign to be displayed on a Retailer-Authorized Subnetwork of CPI Kiosks; Build Kiosk Advertising Campaign by Placing Ad spot Orders to be run on a Particular Subnetwork of CPI Kiosks; Run and Display Kiosk Advertising Campaign on Retailer-Authorized Subnetwork of CPI Kiosks; Modify Kiosk Advertising Campaign; and Monitor Performance of Kiosk Advertising Campaign.

51. The Internet-based consumer product marketing, merchandising and education/information system of claim 50, wherein once the registered advertiser logs into said third subsystem, the advertiser may display and view one or more kiosk advertising directories selected from the group consisting of: a General-type Kiosk Advertising Directory which can be used to identify CPI Kiosks on which the advertiser is authorized by retailers to display advertisements on consumer products; and a Brand-type Kiosk Advertising Directory which can be used to identify CPI kiosks on which the advertiser is authorized by retailers to display advertisements on a particular brand of consumer products.

52. The Internet-based consumer product marketing, merchandising and education/information system of claim 50, wherein said third subsystem employs a data

processing method to generate a General Kiosk Advertising Directory from the data contained with said central UPN/TM/PD/URL RDBMS.

53. The Internet-based consumer product marketing, merchandising and education/information system of claim 52, wherein said data processing method comprises: (1) transmitting a general kiosk advertisement directory request to an Advertisement Slot Marketing/Sales/Management Web server; (2) receiving and parsing this directory request to determine the advertiser's identification number; (3) using the data tables of said central UPN/TM/PD/URL RDBMS and the advertiser's identification number to determine the list of manufacturers (by their MINs) who have retained the identified advertiser as their agents; (4) determining, for each obtained MIN, the physical and virtual CPI kiosks on which the hosting retailers have authorized to place product advertisements; (5) using the ascertained MINs and manufacturer aisle/shelf rights/privileges recorded within said UPN/TM/PD/URL RDBMS to determine those physical and virtual CPI kiosks on which the advertiser may order advertisements about products of manufacturers who have been granted such rights/privileges, whereby this list of physical and virtual CPI kiosks is then compiled to produce the generalized kiosk advertisement directory for transmission to the requesting advertiser.

54. The Internet-based consumer product marketing, merchandising and education/information system of claim 50, wherein a data processing methods is used to generate a Brand Kiosk Advertising Directory from the data contained with said central UPN/TM/PD/URL RDBMS.

55. The Internet-based consumer product marketing, merchandising and education/information system of claim 54, wherein said data processing comprises: (1) transmitting a brand kiosk advertisement directory request to an Advertisement Slot Marketing/Sales/Management Web server, said request including (i) the trademark(s) --brand name(s)-- of products to be covered in the kiosk advertising directory, and the (ii) the advertiser's identification number; (2) receiving and parsing this directory request to determine the trademark(s) of products to be covered in the kiosk advertising directory, and also the advertiser's identification number; (3) using the data tables in said central UPN/TM/PD/URL RDBMS and the advertiser's identification number to

which consumer products carry such trademarks (i.e. brand names) and also the UPNs and MINs of the manufacturers of such trademarked (i.e. branded) products; (4) using the determined MINs to determine the list of physical and virtual CPI kiosks in which manufacturers identified by said MINs having aisle/shelf rights/privileges to display product advertisements; (5) using the list of ascertained CPI kiosks to compile the generalized kiosk advertisement directory for transmission to the requesting advertiser.

56. The Internet-based consumer product marketing, merchandising and education/information system of claim 51, wherein equipped with a kiosk advertising directory, the advertiser builds a kiosk advertising campaign by (1) placing an advertisement spot order to be run on a particular subnetwork of CPI kiosks indicated in the custom-displayed kiosk advertising directory; (2) creating suitable product advertisements (i.e. digital content); and (3) linking the created product advertisements to the advertisement spot order, within said central UPN/TM/PD/URL RDBMS.

57. The Internet-based consumer product marketing, merchandising and education/information system of claim 3, wherein said second subsystem delivers advertisement spots to consumers in retail environments through the use of multi-mode CPI kiosks by (1) loading each advertisement spot within a product advertising/promotion spot queue in a Web server; and (2) serving the advertisement spot from the product advertising/promotion spot queue, to the physical CPI kiosk indicated in the advertisement spot order being executed.

58. The Internet-based consumer product marketing, merchandising and education/information system of claim 57, wherein the price of each product advertising/promotion slot on a particular retailer CPI kiosk is based on several factors selected from the group consisting of: (1) the amount of consumer-activity (i.e. the number of consumer product information requests made/placed) at the particular kiosk over, for example, the preceding month or so, so that kiosks which are more frequently used to make consumer product information request will have higher advertising fees associated with advertising slots maintained in its advertising queue; and (2) the number of product advertising campaigns created and scheduled to run (on a given day) within a particular retail store.

59. The Internet-based consumer product marketing, merchandising and education/information system of claim 57, wherein said third subsystem automatically issues advertising fee credits to the advertiser's accounts if and when a product advertisement spot, once displayed during a randomly-assigned product advertisement/promotion slot is interrupted by a consumer requesting consumer product information (from the CPI kiosk) on a consumer product which is not related to the manufacturer of the product about which the advertisement is being displayed.

60. The Internet-based consumer product marketing, merchandising and education/information system of claim 59, wherein no advertising fee credits will be issued to the advertiser's account if and when a product advertisement, once displayed during a randomly-opened product advertising/promotion slot, is interrupted by a consumer requesting consumer product information (from the CPI kiosk) on a consumer product which is related to the manufacturer whose product advertisement is being displayed.

61. The Internet-based consumer product marketing, merchandising and education/information system of claim 60, wherein if the purchased product advertisement, loaded into a purchased product advertisement slot within a particular kiosk's advertisement/promotion queue, is not displayed over the retailer's CPI kiosks when scheduled for display, then the price paid for the product advertisement is automatically refunded to the advertiser, or the scheduled product advertisement can be rescheduled by the advertiser for display on an alternative display date(s), in accordance with the advertiser's instructions.

62. The Internet-based consumer product marketing, merchandising and education/information system of claim 59, wherein once a kiosk advertising campaign has been ordered to run, the advertiser can enter the Modify Kiosk Advertising Campaign Mode of subsystem, wherein the advertiser is provided the opportunity to modify any one of its registered kiosk advertising campaigns, using a Web-enabled client computer subsystem.

63. The Internet-based consumer product marketing, merchandising and education/information system of claim 62, wherein once a kiosk advertising campaign has run or is running, the advertiser can enter the Monitor Kiosk Advertising Campaign Performance Mode of subsystem, and monitor the performance of any one of the advertiser's kiosk advertising campaigns, using a Web-based client computer.

64. The Internet-based consumer product marketing, merchandising and education/information system of claim 1, wherein said fourth subsystem enables promoter to use one or more information services selected from the group consisting of: (1) registering promoters and the creating promoter accounts; (2) logging into the subsystem by promoter; (3) displaying General Kiosk Promotion Directories and identifying CPI kiosks on which the promoter is authorized to display promotions on consumer products; (4) displaying Brand Kiosk Promotion Directories and identifying CPI kiosks on which the promoter is authorized to display advertisements on a particular brand of consumer products; (5) registering Kiosk Promotion Campaigns to be displayed on an (initially-unspecified) retailer-authorized subnetwork of CPI kiosks; (6) building Kiosk Promotion Campaigns by placing promotion spot orders to be run on a specified subnetwork of CPI kiosks; (10) running and displaying kiosk promotion campaigns on the retailer-authorized subnetwork of CPI kiosks; (11) modifying kiosk promotion campaigns; and (12) monitoring the performance of kiosk promotion campaigns.

65. The Internet-based consumer product marketing, merchandising and education/information system of claim 64, wherein once the registered promoter logs into said third subsystem, the promoter may display and view one or more kiosk promotion directories selected from the group consisting of: a General-type Kiosk Promotion Directory which can be used to identify CPI Kiosks on which the advertiser is authorized by retailers to display promotions on consumer products; and a Brand-type Kiosk Promotion Directory which can be used to identify CPI kiosks on which the advertiser is authorized by retailers to display promotion on a particular brand of consumer products.

66. The Internet-based consumer product marketing, merchandising and education/information system of claim 64, wherein said third subsystem employs a data

processing method to generate a General Kiosk Promotion Directory from the data contained with said central UPN/TM/PD/URL RDBMS.

67. The Internet-based consumer product marketing, merchandising and education/information system of claim 66, wherein said data processing method comprises: (1) transmitting a general kiosk promotion directory request to an Promotion Slot Marketing/Sales/Management Web server; (2) receiving and parsing this directory request to determine the promoter's identification number; (3) using the data tables of said central UPN/TM/PD/URL RDBMS and the promoter's identification number to determine the list of manufacturers (by their MINs) who have retained the identified promoters as their agents; (4) determining, for each obtained MIN, the physical and virtual CPI kiosks on which the hosting retailers have authorized to place product promotions; (5) using the ascertained MINs and manufacturer aisle/shelf rights/privileges recorded within said central UPN/TM/PD/URL RDBMS to determine those physical and virtual CPI kiosks on which the promoter may order promotions about products of manufacturers who have been granted such rights/privileges, whereby this list of physical and virtual CPI kiosks is then compiled to produce the generalized kiosk promotion directory for transmission to the requesting advertiser.

68. The Internet-based consumer product marketing, merchandising and education/information system of claim 64, wherein a data processing methods is used to generate a Brand Kiosk Promotion Directory from the data contained with said central UPN/TM/PD/URL RDBMS.

69. The Internet-based consumer product marketing, merchandising and education/information system of claim 70, wherein said data processing comprises: (1) transmitting a brand kiosk promotion directory request to an Promotion Slot Marketing/Sales/Management Web server, said request including (i) the trademark(s) --brand name(s)-- of products to be covered in the kiosk advertising directory, and the (ii) the promoter's identification number; (2) receiving and parsing this directory request to determine the trademark(s) of products to be covered in the kiosk promotion directory, and also the promoter's identification number; (3) using the data tables in said central UPN/TM/PD/URL RDBMS and



the promoter's identification number to which consumer products carry such trademarks (i.e. brand names) and also the UPNs and MINs of the manufacturers of such trademarked (i.e. branded) products; (4) using the determined MINs to determine the list of physical and virtual CPI kiosks in which manufacturers identified by said MINs having aisle/shelf rights/privileges to display product advertisements; (5) using the list of ascertained CPI kiosks to compile the generalized kiosk promotion directory for transmission to the requesting advertiser.

70. The Internet-based consumer product marketing, merchandising and education/information system of claim 66, wherein equipped with a kiosk advertising directory, the advertiser builds a kiosk promotion campaign by (1) placing an promotion spot order to be run on a particular subnetwork of CPI kiosks indicated in the custom-displayed kiosk promotion directory; (2) creating suitable product promotion (i.e. digital content); and (3) linking the created product promotion to the promotion spot order, within said central UPN/TM/PD/URL RDBMS.

72. The Internet-based consumer product marketing, merchandising and education/information system of claim 3, wherein said second subsystem delivers promotion spots to consumers in retail environments through the use of multi-mode CPI kiosks by (1) loading each promotion spot within a product advertising/promotion spot queue in a Web server; and (2) serving the promotion spot from the product advertising/promotion spot queue, to the physical CPI kiosk indicated in the promotion spot order being executed.

73. The Internet-based consumer product marketing, merchandising and education/information system of claim 72, wherein the price of each product advertising/promotion slot on a particular retailer CPI kiosk is based on several factors selected from the group consisting of: (1) the amount of consumer-activity (i.e. the number of consumer product information requests made/placed) at the particular kiosk over, for example, the preceding month or so, so that kiosks which are more frequently used to make consumer product information request will have higher promotion fees associated with promotion slots maintained in its advertising/promotion queue; and (2) the number of product promotion campaigns created and scheduled to run (on a given day) within a particular retail store.

74. The Internet-based consumer product marketing, merchandising and education/information system of 72, wherein said third subsystem automatically issues promotion fee credits to the promoter's accounts if and when a product promotion spot, once displayed during a randomly-assigned product advertisement/promotion slot is interrupted by a consumer requesting consumer product information (from the CPI kiosk) on a consumer product which is not related to the manufacturer of the product about which the promotion is being displayed.

75. The Internet-based consumer product marketing, merchandising and education/information system of claim 74, wherein no promotion fee credits will be issued to the promoter's account if and when a product promotion, once displayed during a randomly-opened product advertising/promotion slot, is interrupted by a consumer requesting consumer product information (from the CPI kiosk) on a consumer product which is related to the manufacturer whose product promotion is being displayed.

76. The Internet-based consumer product marketing, merchandising and education/information system of claim 74, wherein if the purchased product promotion, loaded into a purchased product promotion slot within a particular kiosk's advertisement/promotion queue, is not displayed over the retailer's CPI kiosks when scheduled for display, then the price paid for the product promotion is automatically refunded to the promoter, or the scheduled product promotion can be rescheduled by the promoter for display on an alternative display date(s), in accordance with the promoter's instructions.

77. The Internet-based consumer product marketing, merchandising and education/information system of claim 74, wherein once a kiosk promotion campaign has been ordered to run, the promoter can enter the Modify Kiosk Promotion Campaign Mode of said fourth subsystem, wherein the advertiser is provided the opportunity to modify any one of its registered kiosk promotion campaigns, using a Web-enabled client computer subsystem.

78. The Internet-based consumer product marketing, merchandising and education/information system of claim 77, wherein once a kiosk promotion campaign has run or is running, the promoter can enter the Monitor Kiosk Advertising Campaign Performance Mode of said fourth subsystem, and monitor the performance of any one of the promoter's kiosk promotion campaigns, using a Web-based client computer.

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